

C++ ASSIGNMENT

1.Ques :Count the number of triplets whose sum is equal to the given value x.

Ans: #include<iostream>

using namespace std;

```
int main(){
    int n;
    cout<<"enter array size: ";
    cin>>n;
    int arr[n];
    for(int i=0;i<n;i++){
        cin>>arr[i];
    }
    int target;
    cout<<"enter target: ";
    cin>>target;
    int count=0;
    for(int i=0;i<n;i++){
        for(int j=i+1;j<n;j++){
            for(int k=j+1;k<n;k++){
                if(arr[i]+arr[j]+arr[k]==target){
                    count++;
                }
            }
        }
    }
    cout<<count;
    return 0;
```

```
}
```

2.Ques :Find the factorial of a large number.

Ans: #include<iostream>

using namespace std;

```
int multiply(int size,int arr[],int n){
    int carry=0;
    for(int i=0;i<size;i++){
        int product=arr[i]*n+carry;
        arr[i]=product%10;
        carry=product/10;
    }
    while(carry){
        arr[size]=carry%10;
        carry/=10;
        size++;
    }
    return size;
}

int main(){
    int n;
    cout<<"enter number: ";
    cin>>n;
    int size=1,res[500];
    res[0]=1;
    for(int i=2;i<=n;i++){
        size=multiply(size,res,i);
    }
    for(int i=size-1;i>=0;i--){
        cout<<res[i];
    }
}
```

```
        return 0;
    }
```

3.Ques :Find the first non-repeating element in the array .

Ans: #include <iostream>

using namespace std;

```
int main() {
    int arr[5]={1,1,2,4,7};
    int n=5;
    for (int i = 0; i < n; i++) {
        int j;
        // Checking if ith element is present in array
        for (j = 0; j < n; j++)
            if (i != j && arr[i] == arr[j])break;
        if (j == n){
            cout<<arr[i];
            return 0;
        }
    }
    return 0;
}
```

4.Ques:Move all zeros to the end of the array.

Ans: #include<iostream>

using namespace std;

```
int main(){
    int n;
    cout<<"enter array size: ";
    cin>>n;
    int a[n];
    for(int i=0;i<n;i++){
```

```
        cin>>a[i];
    }
    int j=0;
    for(int i=0;i<n;i++){
        if(a[i]!=0){
            int temp=a[i];
            a[i]=a[j];
            a[j]=temp;
            j++;
        }
    }
    for(int i=0;i<n;i++){
        cout<<a[i];
    }
    return 0;
}
```